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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/612,996 | 07/07/2003 | Tommy Olaus Johnson | 19903.0043 | 9812 |
| 23517 7590 07/31/2007 BINGHAM MCCUTCHEN LLP 2020 K Street, N.W. Intellectual Property Department WASHINGTON, DC 20006 | | | EXAMINER GELAGAY, SHEWAYE | |
| | | | ART UNIT 2137 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 10/612,996 | Applicant(s) JOHNSON ET AL. | |
| | Examiner Shewaye Gelagay | Art Unit 2137 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to Applicant's amendment filed on May 9, 2007. Claims 1, 7-8, 14, 17, 20-21, 27-28, 34, 37, 41, 47-48, 54, 57 and 60 have been amended. New claims 61-64 have been added. Claims 1-64 are pending.

Claim Rejections - 35 USC § 112

2. In view of the amendment filed May 9, 2007, the Examiner withdraws the rejection of claims 8-14, 28-34 and 48-54 under 35 U.S.C. 112.

Claim Rejections - 35 USC § 101

3. In view of the amendment filed May 9, 2007, the Examiner withdraws the rejection of claims 41-60 under 35 U.S.C. 101.

Response to Arguments

4. Applicant's arguments filed May 9, 2007 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tso et al. (hereinafter Tso) US Patent 6,088,803 in view of Fielding et al. "Hypertext Transfer Protocol -- HTTP/1.1", RFC, June 1999, (hereinafter Fielding).

As per claims 1, 21 and 41

Tso teaches a method of scanning a requested file for a computer malware comprising the steps of:

receiving a request to transfer a file from computer malware scanning software;
(col. 2, lines 16-67)

receiving a request from the computer malware scanning software for data comprising a randomly accessed portion of the requested file; (col. 3, lines 10-54; col. 5, lines 1-43) and

transferring the requested portion of the file and supplying the requested data to the computer malware scanning software to fulfill the request for data comprising a portion of the requested file. (col. 3, lines 10-54; col. 5, lines 1-43)

Tso does not explicitly disclose wherein the randomly accessed portion of the file is requested utilizing a byte range technique. Fielding in analogous art, however discloses wherein the randomly accessed portion of the file is requested utilizing a byte range technique. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range) Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Tso with Fielding in order to request one or more sub-ranges of a file, instead of the entire file, using the range

Art Unit: 2137

request header to have an up-to-date copy of the entire file. (page 82, 14.27 If-Range; Fielding)

As per claims 2, 22 and 42:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Tso further discloses a method wherein the request to transfer the file from the computer malware scanning software comprises a request to transfer the file from an external system. (col. 2, lines 22-25)

As per claims 3-4, 23-24 and 43-44:

The combination of teaches all the subject matter as discussed above. In addition, Tso further discloses a method wherein the external system is communicatively connected via a network. (figure 1)

As per claims 5, 18, 25, 38, 45 and 58:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses a method wherein the step of transferring the requested portion of the file comprises the step of: initiating a session with the external system to obtain the requested portion of the file. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claims 6, 19, 26, 39, 46 and 59:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses a method wherein the session is a hypertext transfer protocol session. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claims 15, 35 and 55:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Tso further discloses a method comprising the step of: performing the steps of claim 1 in response to a request from a user system for the file. (col. 2, lines 16-67)

As per claims 16, 36 and 56:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Tso further discloses a method comprising the steps of: scanning at the computer malware scanning software the data comprising a portion of the requested file to determine if the file includes a computer malware; (col. 3, lines 10-54) and delivering the file to the user system in response to determining that the file does not include a computer malware. (col. 3, lines 38-65)

As per claims 17, 37 and 57:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses a method wherein the step of delivering the file to the user system comprises the steps of: determining whether the entire file has been transferred; (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range) starting delivery of the file to the user system even if the entire file has not been transferred; (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range) and transferring those portions of the file that have not been transferred and delivering those portions of the file once they have been transferred. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claims 7, 20, 27, 40, 47 and 60:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses wherein the hypertext transfer protocol session uses the byte range technique. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claims 8, 28 and 48:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses a method comprising the steps of: determining that the requested portion of the requested file cannot be transferred; (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range) and transferring an entirety of the requested file and supplying the requested data to the computer malware scanning software to fulfill the request for data comprising a portion of the requested file. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claims 9, 29 and 49:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses a method wherein the requested portion of the requested file cannot be transferred because the requested portion of the requested file cannot be randomly accessed. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claims 10, 30 and 50:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses a method wherein an indication that the requested portion of the requested file cannot be randomly accessed comprises an error indication or a transfer of the entire requested file. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claims 11, 31 and 51:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses a method comprising the steps of: tracking information associated with each transfer of a requested portion of the file; and determining that information associated with the file has changed. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claims 12, 32 and 52

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses a method wherein the information associated with the file comprises hypertext transfer protocol entity tags or last modified timestamp information. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claims 13, 33 and 53:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Tso further teaches a method comprising the step of: restarting the requests from the computer malware scanning software for data. (col. 3, lines 10-54)

As per claims 14, 34 and 54:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses a method comprising the step of: transferring an entirety of the requested file. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claim 61:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Fielding further discloses a method wherein the byte range technique turns a serial download mechanism into a random access file mechanism. (pages 82-83, Section 14.27: If-Range; Pages 85-86, Section 14.35 Range)

As per claim 62:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Tso further teaches a method wherein the data associated with the request from the computer malware scanning software comprises a plurality of selected randomly accessed portions of the requested file. (col. 3, lines 10-54; col. 5, lines 1-43).

As per claim 64:

The combination of Tso and Fielding teaches all the subject matter as discussed above. In addition, Tso further teaches a method wherein the plurality of selected randomly accessed portions of the requested file are read in a random order. (col. 3, lines 10-54; col. 5, lines 1-43)

7. Claims 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tso et al. (hereinafter Tso) US Patent 6,088,803 in view of Fielding et al. "Hypertext Transfer

Protocol -- HTTP/1.1" (hereinafter Fielding) and further in view of Guthrie U.S. Patent Number 6,266,681.

As per claim 64:

The combination of Tso and Fielding teaches all the subject matter as discussed above. Both references do not explicitly disclose a method wherein a system call handler intercepts system level calls made by the computer malware scanning software and simulates system level function calls utilized by the computer malware scanning software to determine whether the file includes the computer malware. Guthrie in analogous art, however, discloses a system call handler intercepts system level calls made by the computer malware scanning software and simulates system level function calls utilized by the computer malware scanning software to determine whether the file includes the computer malware. (col. 2, lines 22-64; col. 3, lines 31-42) Therefore it would have been obvious to one ordinary skill in the art at the time the invention was made to modify the device disclosed by Tso and Fielding with Guthrie in order to provide additional security by intercepting http messages enabling browser with additional functionality without modifying the browser. (page 82, 14.27 If-Range; Fielding)

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shewaye Gelagay whose telephone number is 571-272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2137

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shewaye Gelagay




EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER